

**Notice of Allowability**

Application No.

10/700,300

Examiner

Kalimah Fernandez

Applicant(s)

VESTAL ET AL.

Art Unit

2881

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 2-25-05.
2. ☒ The allowed claim(s) is/are 32-54,57-63 and 66-71.
3. ☒ The drawings filed on 22 March 2004 are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
  1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  6. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☐ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## **DETAILED ACTION**

### ***Allowable Subject Matter***

1. Claims 32-54, 57-63, and 66-71 are allowed. The following is an examiner's statement of reasons for allowance: the prior art of record fail to teach or fairly suggest the claimed invention.
2. Specifically, no teaching or obvious suggestion was found of the limitation " a first ion optics system configured to extract sample ions; a heater system connected to the first ion optics system; and temperature-controlled surface disposed substantially around at least a portion of the first ion optics system" as in claim 32 and 43.
3. No teaching or obvious suggestion was found of the limitation "replacing the sample surface with a blank; heating the first ion optics system to vaporize matrix molecules deposited thereon; and collecting at least a portion of the vaporized matrix molecules on the blank" as in claim 59.
4. Claims 33-42, 44-54, 57-58, 60-63, and 66-71 are allowed by virtue of their dependency.
5. US Pat No. 6,707,040 issued to Makarov teach a heated ion guide in col.5, lines 30-36, but fail to teach or fairly suggest a temperature-controlled

surface disposed substantially around at least a portion of the ion optics system.” US Pat No. 6,504,150 issued to Verentchikov et al teach a temperature-controlled ion transport module (17b) surrounding ion optics elements (see fig.3), but fails to teach or fairly suggest “ a first ion optics system configured to extract sample ions. Rather, Verentchikov et al teach his ion optic elements are used to focus ions to prevent ion loss (see col.4, lines 54-60). Verentchikov et al also suggest a temperature-controlled source chamber (14b) in col.6, lines 19-38, but does not teach or fairly suggest heated ion optics configured to extract sample ions as recited in claims 32 and 43. US Pat No 5,898,173 issued to Franzen teach an ion optics system configured to extract sample ions, but fails to teach or suggest heating or temperature-control (see for example col.3, lines 1-8).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled “Comments on Statement of Reasons for Allowance.”

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kalimah Fernandez whose

telephone number is 571-272-2470. The examiner can normally be reached on Mon-Tues 6:30-3:30; Wed-Thurs 8-5 and Fri.9am-6 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 571-272-2477. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

KF

  
JOHN R. LEE  
SUPERVISORY PATENT  
TECHNOLOGY CENTER